

REMARKS

Claims 1 to 5 are currently pending in the application. Claims 1 to 5 are currently rejected under 35 U.S.C. §§ 102(b), 102(e) and 103(a). Claims 1 and 3 through 5 are also the subject of a provisional rejection for obviousness type double patenting over copending patent Application No. 10/844,640. Applicant has amended Claims 1, 4 and 5.

Amendments

Applicant has amended Claim 1 to recite a composition “consisting essentially of” 70 to 95 percent weight of a homopolymer and 5 to 30 percent by weight of an ethylene/propylene random copolymer. The recitation of “consisting essentially of” replaces the “comprising” language, and is supported by all of the examples provided according to the invention in the specification. Further, the addition of the term “random” modifies the recitation of ethylene/propylene copolymer, and is also supported throughout the specification. This second amendment is merely intended to clarify the scope of the claims.

Applicant has amended Claim 4 to replace the phrase “further comprising” with the phrase “wherein the composition contains.” This amendment has been made merely to comport with the “consisting essentially of” language in Claim 1. No new matter has been added.

Applicant has amended Claim 5 to replace the “comprising” language with “consisting essentially of.” Applicant has also amended Claim 5 to recite an ethylene/propylene random copolymer. The amendments to Claim 5 correspond those made to Claim 1 and are supported by the original specification for the same reasons.

Double Patenting Rejection

Applicant respectfully requests that the provisional double patenting rejection over copending Application No. 10/844,640 be held in abeyance until patentable claims have

been identified in both applications.

Rejections under 35 U.S.C. §§ 102(b), 102(e) and 103(a)

The Examiner has cited four separate references as individually rendering Claims 1 through 5 either anticipated or obvious. As the Examiner has cited the references individually, Applicant will address the references in the same manner.

Claim 1 is the sole independent claim, and recites a resin composition suitable for processing into a biaxially oriented polypropylene film. The composition consists essentially of about 70% to about 95% by weight of a polypropylene homopolymer having less than 3% by weight xylene solubles, and about 5% to about 30% by weight of an ethylene/propylene random copolymer containing from about 0.5% to about 7.0% ethylene by weight.

Rejection over US2003/0088022

Claims 1 through 5 have been rejected under 35 U.S.C. § 102(e) as anticipated by, or in the alternative, under 35 U.S.C. § 103(a) as obvious over published U.S. Patent Application US2003/0088022 to Lin *et al.* (“Lin”). Applicant traverses this rejection.

Amended Claim 1 recites a composition that consists essentially of 70 to 95 percent by weight of a polypropylene homopolymer and 5 to 30 percent by weight of an ethylene/propylene random copolymer.

Applicant respectfully points out that for a reference to either anticipate or render obvious a claim, the reference must either explicitly or inherently disclose each and every claim limitation. As the Examiner notes, Lin teaches blends of two homopolymers. Therefore, Lin does not teach each and every limitation of Claim 1. Examiner asserts that the lower limit of “about” 0.5 percent embraces the exclusion of ethylene. However, Applicant respectfully points out that Claim 1 explicitly recites an ethylene/propylene

random copolymer. Applicant respectfully submits that this recitation specifically excludes homopolymers.

Applicant therefore respectfully submits that Claim 1 cannot be anticipated by or obvious over Lin. Because Claims 2 through 5 depend from Claim 1, Applicant further submits that these claims also cannot be anticipated by or obvious over Lin.

Reconsideration is respectfully requested.

Rejection over U.S. Patent No. 6,639,018

Claims 1 through 5 have been rejected under 35 U.S.C. § 102(e) as anticipated by, or in the alternative, under 35 U.S.C. § 103(a) as obvious over U.S. Patent No. 6,639,018 to Yunoki *et al.* (“Yunoki”). Applicant traverses this rejection.

Amended Claim 1 was discussed above.

Yunoki discloses a composition comprising 20 to 98 parts by weight of a polymer A and 2 to 80 parts by weight of a polymer B. The polymer A is disclosed as having an intrinsic viscosity measured in tetralin at 135° C of 2.0 to 5 dl/g, and a melting temperature of 140 to 162° C. The polymer B is disclosed as having an intrinsic viscosity measured in tetralin at 135° C of 0.8 to 1.8 dl/g, and a melting temperature of 160 to 162° C.

Yunoki further discloses that either of polymer A or polymer B may be selected from homopolymers of polypropylene, random copolymers of propylene and ethylene, random copolymers of propylene and C₄ to C₁₂ α -olefins, and random copolymers of propylene, ethylene and a C₄ to C₁₂ α -olefin. Yunoki states that the polymer A is preferably a propylene based random copolymer, but does not specify preferred comonomers. Yunoki, col. 3, lns. 51-53. Further, it is disclosed that polymer B is preferably a polypropylene homopolymer. Yunoki, col. 4, lns. 22-23.

Yunoki provides no specific guidance regarding the content of xylene solubles in either of polymer A or B when those polymers are polypropylene homopolymers. Table 1 of Yunoki does disclose several polypropylene homopolymers having xylene solubles of less than 3 percent. Further, Yunoki contains no specific guidance on combinations of homopolymers with random copolymers of ethylene and propylene. Yunoki does disclose one ethylene/propylene random copolymer containing 3.7 percent ethylene, and one blend of a polypropylene homopolymer with that ethylene/propylene random copolymer. However, none of the examples shows a propylene homopolymer blended with an ethylene/propylene random copolymer in the proportions recited in Claim 1. As a result, Yunoki does not disclose any example having each and every limitation recited in Claim 1.

MPEP 2131.03 states, that where a finding of anticipation is based on an overlapping of claimed ranges with ranges disclosed in a reference and the reference has no specific example falling within the claimed range, the prior art reference must disclose the claimed invention with “sufficient specificity to constitute an anticipation under the statute.” As recently reiterated by the CAFC in *Atofina v. Great Lakes Chemical Corp.*, 441 F.3d 991, 78 USPQ.2d 1417 (Fed. Cir. 2006), while a single species may anticipate a genus of which it is a part, “[i]t is well established that the disclosure of a genus in the prior art is not necessarily a disclosure of every species within the genus.” In *Atofina* the CAFC reversed a finding of anticipation by the District Court where the prior art taught a broad temperature range of 100 to 500°C, which encompassed the patentee’s narrower claimed range of 330 to 450° C. In *Atofina* as well, the prior art did not disclose a specific example within the claimed range. The court stated that, “[g]iven the considerable difference between the claimed range and the range in the prior art, no reasonable fact finder could conclude that the prior art describes the claimed range with sufficient specificity to anticipate this limitation of the claim.”

Atofina, 441 F.3d at 999. The court further held that the disclosure of a range does not constitute a specific disclosure of the endpoints of that range. *Id.* at 1000. Applicant respectfully submits that situation here is the same as in *Atofina*. The general disclosure of Yunoki is insufficient to support a finding of anticipation of Claim 1. This is especially true given that the instant specification discloses improved processability in making oriented films from the claimed blends. In contrast, Yunoki is specifically directed to improving the impact resistance of injection molded parts.

Regarding the assertion of obviousness, the Examiner has provided no reasoning as to why Claim 1 would be obvious over the disclosure of Yunoki. Nonetheless, Applicant further respectfully submits that Yunoki does not disclose the claimed compositions with sufficient specificity to render them obvious. As stated above, Yunoki does not disclose any examples within the claimed ranges. Further, Yunoki does not contain any guidance regarding the content of xylene solubles in the homopolymers it discloses. Finally, Yunoki contains no indication of the superior processability of the instantly claimed blends in the manufacture of oriented films. Applicant therefore respectfully submits that it would not have been obvious for one having ordinary skill in the art to modify the teachings of Yunoki to provide the blends of polypropylene homopolymers having less than 3 percent xylene solubles with ethylene/propylene random copolymers as recited in Claim 1.

Given the lack of direction provided by Yunoki concerning the xylene solubles content of its polypropylene homopolymers, and the lack of specificity regarding the blends of polymers A and B, Applicant respectfully submits that Claim 1 can be neither anticipated by nor rendered obvious by Yunoki. Further, since dependent Claims 2 through 5 depend from Claim 1, Applicant respectfully submits that those claims also cannot be anticipated or obvious. Reconsideration is respectfully requested.

Rejection over U.S. Patent No. 6,346,580

Claims 1 through 5 have been rejected under 35 U.S.C. § 102(b) as anticipated by, or in the alternative, under 35 U.S.C. § 103(a) as obvious over U.S. Patent No. 6,346,580 to Fujita *et al.* (“Fujita”). Applicant traverses this rejection.

Claim 1 was discussed above.

Fujita discloses a polymer composition comprising 5 to 50 percent by weight of a polypropylene homopolymer A and 50 to 95 percent by weight of a polymer B. Polymer A is disclosed as having an intrinsic viscosity measured in tetralin at 135° C of at least 1.2 dl/g and a heptane insoluble portion of 5.0 to 50 percent. Polymer B is disclosed as being either a polypropylene homopolymer (B1) having an isotactic pentad fraction of 0.970 or more, or blend of at least 65 percent by weight of polymer (B1) with up to 35 percent by weight of an ethylene/propylene random copolymer (B2).

It is asserted that when polymer B as disclosed by Fujita comprises a blend of (B1) and (B2) that Fujita anticipates or renders obvious Claim 1.

Applicant respectfully submits that amended Claim 1 cannot be anticipated by or rendered obvious by Fujita since the compositions of Fujita necessarily include the polypropylene homopolymer component polymer (A), which is disclosed as having extremely high xylene soluble content. Fujita, col. 2, lns. 29-32 and Table 1. Therefore, in the compositions of Fujita, where polymer (B) is a blend of polymer (B1) and polymer (B2), the composition as a whole is a three part composition comprising a low crystallinity, high solubles polypropylene homopolymer, a crystalline polypropylene homopolymer and an ethylene/propylene random copolymer.

In contrast, Claim 1 recites a composition consisting essentially of 70 to 95 percent by weight of a polypropylene homopolymer having a xylene soluble content of less than 3

percent, and 5 to 30 percent by weight of an ethylene/propylene random copolymer.

Applicant therefore respectfully submits that Claim 1 cannot be anticipated by or rendered obvious by Fujita. Reconsideration is respectfully requested.

Rejection over U.S. Patent No. 6,225,411

Claims 1 through 5 have been rejected under 35 U.S.C. § 103(a) as obvious over U.S. Patent No. 6,225,411 to Dang *et al.* ("Dang"). Applicant traverses this rejection.

Claim 1 was discussed above.

Dang discloses a composition comprising (1) a propylene homopolymer or copolymer having an isotactic index of greater than 90, and (2) a propylene homopolymer or copolymer having a crystallinity of less than 24 percent, made with a metallocene catalyst. Where the polymer (1) or (2) is a copolymer the comonomer content is less than 10 percent of ethylene or a C₄ to C₈ α -olefin.

Examiner asserts that Dang is silent as to xylene soluble content, but that the xylene soluble content of the polymers disclosed by Dang would be expected to be similar to those in Claim 1. Applicant respectfully points out that Dang does discuss xylene solubility of its homopolymers. Dang discloses the isotactic index of its polymers as being the percent of polymer insoluble in xylene. Dang, col. 4, lns. 18-34. Since Dang discloses an isotactic index as low as 90 it necessarily embraces homopolymers having a xylene soluble content as high as 10 percent. Further, in the example provided by Dang, the i-PP portion of the blend (polymer (1)) has an isotactic index of 95.4, which corresponds to a xylene soluble content of 4.6 percent. Although the xylene soluble content of the m-PP portion of the blend (polymer (2)) is not explicitly addressed, it is disclosed as having a crystallinity of less than 24 percent. Applicant respectfully submits that a polymer of such low crystallinity would possess a high xylene solubles content.

Further, the only examples provided by Dang are blends of two polypropylene homopolymers. Therefore, as with Yunoki, Dang does not disclose an example within the range of Claim 1. Further, Applicant respectfully submits that Dang's general disclosure does not provide sufficient specificity to support a *prima facie* case of obviousness of Claim 1. Since Claims 2 through 5 depend from Claim 1, Applicant further respectfully submits that those claims also are not obvious over Dang. Reconsideration is respectfully requested.

CONCLUSION

Applicant believes that the foregoing remarks have overcome or rendered moot all grounds for rejection or objection. There being no other rejections or objections, Applicant believes that the application is in a condition for allowance. Applicant therefore respectfully requests prompt action on the claims and allowance of the application. If the Examiner believes that personal communication will expedite prosecution of the application, the Examiner is invited to telephone Applicant's undersigned agent directly.